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HEALTH, SOCIAL AND ECONOMIC CONDITIONS

In

HEALTH AREA 20

EAST HARLEM HEALTH DISTRICT

DEPARTMENT OF HEALTH

NEW YORK CITY

Prepared by Special Committee on
Health Area 20 of the East Harlem
District Health Committee

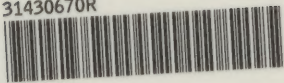
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STUDY OF HEALTH, SOCIAL AND ECONOMIC CONDITIONS
IN HEALTH AREA 20
EAST HARLEM HEALTH DISTRICT - NEW YORK CITY

Prepared by Special Committee on
Health Area 20 of the East Harlem
District Health Committee of the
Committee on Neighborhood Health
Development

167-187
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FOREWORD

In 1938, it was felt that some of the principles of health program planning should be reapplied particularly in East Harlem* where health workers had become aware of the fact that marked population changes had occurred in the district since the census was taken in 1930. Program activities based on data from that census were believed to be out-moded. It is well recognized that shifts in population density, economic status, and racial groupings together with trends in the leading causes of sickness and death all must play a part in working out the pattern for an effective health program for a community. How to convert the general awareness of such changes to basic factual data was the problem. Realizing its importance, the District Health Officer asked the assistance of the District Health Committee in making a detailed study of one District Health Area in which the problems seemed most acute.

Early in 1939 a specially appointed sub-committee of the District Health Committee met to consider ways and means. Several fortunate factors for the success of any such undertaking were and are present in East Harlem. The health district has a cooperative teaching affiliation with one of the five medical schools in the city. The offices of the Department of Preventive Medicine of this school are in the Health Center building and the head of the Department acted as chairman of the committee for this study. The district is well organized and established in its own right in addition to enjoying a valuable heritage from the East Harlem Health Center Demonstration initiated by the American Red Cross. From 1919 to 1934 the "Old East Harlem Center" laid many foundations for cooperative working relationships. Perhaps nowhere else in the city do the professional workers have a better understanding of basic community needs or rally more willingly to assist in any needed project.

Health Area 20** was selected for the study not only because of the congestion within its boundaries, the extent of its health problems, and the great rapidity with which changes seemed to be occurring but also because the organizations represented on the District Health Committee were all vitally interested in it.

In setting up the study, the committee went for counsel and guidance to outstanding leaders in public health work and related fields. The Commissioners of Health and Welfare, several professors of the social sciences at a large university, and representatives of both the National Institute of Health and of the Welfare Council gave generously of their time as informal consultants.

It was agreed that although a house to house survey of all individuals in the Health Area would provide the most accurate information, such a procedure was not possible at the time because of practical cost aspects.

*See map inside front cover.

**See Appendix

Therefore, it was agreed that some other method of collecting data should be used.

Inquiry disclosed that at the time of the study (1939), about one-third of the population of the Health Area was receiving home relief while an additional third was on work relief. Those on work relief were known to have social, economic, and health problems quite similar to those receiving home relief. In addition, there were many families in the area who received assistance from various private and other public agencies and whose problems also were similar to those of the home and work relief recipients. The committee decided, therefore, to make a detailed study of the group receiving home relief in the belief that the facts disclosed would be applicable to the majority of residents in the area. Since many of the home relief families were known also to the Health Department, a wealth of data was available.

Under the guidance of the committee, which met frequently to review progress and consider data currently presented, the study was carried on, in close cooperation, by the East Harlem Health Center of the Department of Health, the research section in the Bureau of Finance and Statistics of the Department of Welfare, and the Department of Preventive Medicine of the New York Medical College, Flower-Fifth Avenue Hospital. Students from the New York Medical College and the De Lamar Institute of the College of Physicians and Surgeons, Columbia University, also participated.

On a selected day, March 1, 1939, the research staff of the Department of Welfare assembled on schedules* all the data concerning the sociological, economic, housing, and health conditions of all the families in Health Area 20 known to the Department on that date. There were 2668 such families comprising 9119 individuals. The names of these individuals were checked against the central file and clinic records of the Health Center for further data. The vast amount of material was then assembled, tabulated, and analyzed by the Department of Welfare research group. A total of 179 tables were prepared.**

The report which follows is an analysis of those tables and presents the salient points of the study of Health Area 20. Part I deals with the social and welfare background while Part II presents the health conditions prevailing at the time the study was commenced. While the report is by no means the last word on the subject, it nevertheless has confirmed, by means of concrete factual data, many of the general observations of workers in the field. On the basis of the information collected, the Health and Welfare programs for the district have been considerably modified and improvement has already become noticeable, although by and large the general picture still holds.

The committee wishes to express its acknowledgment and grateful appreciation to all those who have made this report possible. Special acknowledgment is due the Department of Welfare which gave unsparingly of the time and technical advice of its research staff, the use of its case records and its facilities for tabulation of the results, and the assignment of staff to obtain the basic information available in the case records.

* See Appendix

** Foot Note: These basic tables are too voluminous for publication in the present study, but are available to anyone who may be interested.

SUMMARY AND CONCLUSIONS

In presenting this report on Health Area 20, a mass of material on the population, health, social and economic conditions has been assembled and analyzed by a special committee appointed by the East Harlem Council of Social Agencies. The Department of Welfare, Department of Health and the New York Medical College, Flower and Fifth Avenue Hospitals co-operated closely in preparing this report.

As a result of this study, a much more concrete picture of the existing conditions has been made available to those interested in improving health and welfare in this section of New York City. A brief summary of the findings and conclusions follows:

Health Area 20 is a small compact area covering twenty-eight square blocks in the northeastern part of the East Harlem Health District. The houses are largely old-law tenements, five and six stories high, and the district has neither parks, playgrounds, day nurseries, nor settlement houses. There have been marked changes in the composition of the population, and in approximately ten years Negroes have increased more than 32% and Puerto Ricans over 100%.

The families in the area are continually on the move. More than half of those in this particular survey moved on the average of more than once each year, and the larger the family, the more frequent were the changes of address. Studies made by the Mayor's Committee on City Planning and other groups on housing and other community problems have emphasized the needs in East Harlem, and definite steps should be taken to bring some of these recommendations to a point of realization.*

The survey group comprised 9119 people, in 2668 families on home relief. This is nearly one-third of the total population of Health Area 20, which is approximately 29,000. At least three-fifths of the entire population of Health Area 20 is on either home or work relief, and in addition, other private and official agencies are giving some form of public assistance. It is significant that of the 2668 home relief families which were studied, 85% first received relief prior to 1938 while 58% had never been financially independent since the original date of receipt of public assistance. Another 28% had been "off relief" only once.

The average yearly cash income of those in the survey was \$652.00 per family. Of this total amount, 43.6% was spent for rent, 49.4% for food, and only 7.0% remained for all other necessities. Medical services, special clothing grants, surplus commodities, etc. are not included in this average yearly cash income. Less than one-seventh were totally unemployable, but almost one-half of those who were employable had never had a normal occupation.

*Since this study was commenced, the East River Houses and the new Benjamin Franklin Boys' High School have been built in the East Harlem Health District.

Contrary to popular belief, the average size family was not large, only 3.42 persons, but the Puerto Rican families were larger than the White or Negro with a larger proportion of children under 16 years. The Puerto Ricans had the lowest percentage of single persons and the highest percentage of married persons. Again, contrary to expectations, the Negro group, which was a younger group than the White group, had the highest percentage of widowed persons. The Negroes had the highest percentage of divorces, desertions, and separations, while the Whites had the lowest.

One-half of the group of 9119 persons was under 18.6 years of age, while the average age was only 24 years. Puerto Ricans represented the youngest of the three major population groups.

It is self-evident that the financial status of this group, which is fairly young, leads to mere maintenance existence. Although six-sevenths of the adults were partially or wholly employable, almost half of this group has never had a normal occupation. This indicates clearly the need for a definite program designed to make them self-sustaining through vocational training and like procedures rather than through efforts aimed at providing further forms of relief.*

In spite of the youth of the population, one-third was afflicted with one or more types of chronic diseases. In the order of frequency these were venereal, cardiovascular, tuberculosis, nervous and mental, cancer and other tumors, and diabetes. While cardiovascular diseases ranked second in order, the incidence was similar to that found in the country at large as pointed out in the National Health Survey. Significant data were collected on nervous and mental diseases, cancer and other tumors, but the data on diabetes are not considered statistically significant. On the other hand, the venereal diseases and tuberculosis require special comment.

While it is probable that an unknown number of cases of venereal diseases has not been discovered, all cases reported in this survey were verified as to diagnosis and represent infection in almost 6% of the population. Seven-eighths of the cases were found in the age groups 20 through 54. The incidence was higher among males than among females. The highest incidence was found in the Puerto Ricans with the Negroes a close second. Only 2.9% was found in the Whites. The facts presented in this survey show that Health Area 20 is a sore spot in so far as venereal disease is concerned. While a great deal of impetus has been given to the eradication of venereal disease in this country and considerable progress made in the past few years, there is still much to be done. So, in East Harlem, services for the treatment have been increased and education of the public has been an important part of the health program.

The National Health Survey indicated that the incidence of tuberculosis in the United States was 0.5% while in this study the incidence of tuberculosis in Health Area 20 was 4.0%. In 1939, the tuberculosis death rate in this area was three times as high as for New York City. In addition, the study indicates that more than one-quarter of these cases occurred in children.

*The NYA program and Adult Education Projects were constructive procedures in this direction.

Among Negroes in Health Area 20, the incidence of tuberculosis is a little more than one-half that for Whites and a little more than one-third that for Puerto Ricans, but the death rate among Negroes is highest, confirming other studies which indicate a low resistance to the disease once it is acquired.

In pointing out that the death rate from tuberculosis in Health Area 20 is three times that for New York City as a whole, and that the incidence of this disease is eight times that for the United States, there can be no question as to the gravity of this particular health problem. The association of tuberculosis with slum housing, poverty, and overcrowding must be referred to in this connection. Active services by the Department of Health as well as private organizations have been part of the program in Health Area 20, and these have been expanded to meet changing conditions. However, the situation calls for more and more effort not only along the lines of diagnosis and treatment but toward the part of improved economic and housing conditions.

In contrast with chronic illness, the picture of acute illness is somewhat less somber. Approximately one-eighth of the survey group suffered from acute illness as compared with the National Health Survey of one-tenth. Almost one-fifth of the acute illnesses occurred in the age group one to four years and almost 90% of these illnesses were respiratory or contagious in character. The pre-school child is apparently still the "forgotten child." Medical supervision of this group is still far from adequate and the need for closer contact and more extensive use of available health facilities is evident.

Health care of various types was given by different agencies. Altogether, 1104 infants and pre-school children attended the East Harlem Health Center together with its substation, Meinhard, as well as two additional child health stations which give service to the district. Nearly two-fifths of the 1104 children under five in the survey were registered in child health services. There were only 67 infants under one year of age. Almost half of the survey population received some form of diagnostic or therapeutic care while on relief. The Health Department cared for the largest group or one-third. The next largest, one-fifth, attended clinics in public or voluntary hospitals. The remainder were cared for by private physicians, hospitals and the Department of Welfare.

The findings in this study indicated a need for modification of the health and welfare work carried on in Health Area 20. In the health services, intensification or augmentation of existing services has already been made. However, lack of money, personnel, and the war situation in general have made, and probably for a long time to come, will make it necessary to postpone the inauguration of many changes which have been contemplated.

There is little doubt that a population with a high incidence of chronic disease and with many young children requires proper living conditions and adequate nourishing diets. Effort has been made to ameliorate conditions by increasing allowances for clothing and incidental expenses, and providing necessary household items such as towels, bedding, etc. The Food Stamp Plan has also added greatly to dietary sufficiency. This plan was inaugurated by the Department of Agriculture of the Federal Government as a method of moving surplus foods, thus not only providing

extra nourishment for families with marginal incomes but also giving economic aid to the farmer and the retailer. Stamp selling offices have been established by the Department of Welfare in each of the local welfare centers. Authorizations to purchase stamps are mailed by the Department of Welfare to all individuals and families receiving public assistance, WPA, or certified by private welfare agencies if these families have home cooking facilities and meet the requirements for eligibility set by the Agricultural Marketing Administration of the Department of Agriculture. Cash received for food on a budgetary basis may be used to purchase orange stamps. These stamps, in turn, purchase all food commodities on sale at local stores. When orange stamps are purchased, free blue stamps are given to the purchaser. These free blue stamps have a value of 50.0% of the orange stamps for family groups and 33.3% for unattached persons. The blue stamps, in turn, are used to purchase all foods listed as surplus commodities by the Department of Agriculture, thus increasing the food budget by 33.3% to 50.0%. Ten to twelve different foods are listed as surplus each month. Thus far, these surplus foods have included eggs, butter, prunes, grapefruit, oranges, pears, apples, potatoes, beans and other fresh vegetables, hominy grits, three or four types of flour, pork, and other basic health foods. Over 74% of all the families and unattached persons on the public assistance rolls are participants in the Stamp Plan.

A second addition to the diet has come through the distribution of free milk to all children under the age of 16 on the public assistance rolls. This is also given through the distribution of free stamps good for one pint per day per child. The milk is obtained by the recipient through the regular food stores on presentation of the stamps. The cost of this milk is shared by the City, State, and Federal Government.

Thus, basic and necessary foods for the maintenance of health are being provided to low-income families. However, cash or free distribution alone will not solve the problem of adequate nourishment. Even persons who are not limited by monetary necessities frequently have deficient diets because of lack of knowledge of basic nutritional principles. The Department of Welfare, therefore, has free literature in English, Italian, and Spanish available in every welfare center. This literature explains in simple terms the basic principles of good nutrition and provides information on planning meals. Home economists in the welfare centers also give talks to public assistance recipients on marketing, budgeting and home making, and set up exhibits in each welfare center.

No social program can hope to succeed without an intensive educational program. Particularly is this so in the health field. People must be taught not only to maintain their own health but also to cooperate with the agencies providing health and medical care. Classes on various aspects of health work are conducted by teachers who speak the various tongues spoken by the people in the area so that the import of the lessons will not be lost and there will be a greater opportunity for class participation. More projects, more demonstrations, and illustrated lectures should be part of this program.

In no case should we lose sight of the fact that the amelioration of health and social conditions in the area would serve to reduce the hazard which this area offers to the rest of the community. General well-being leads to good citizenship. And in these troubled times we cannot afford to overlook any of the means by which people become good citizens.

SOCIAL AND WELFARE BACKGROUND

ETHNOGRAPHIC PICTURE

Health Area 20,* lying between 112th and 119th Streets and Fifth and Third Avenues, is situated in the northwest corner of the East Harlem Health District and joins the Central Harlem District on the west and north. Crowded, full of old housing, dirty, its streets shared by congested traffic, street vendors, and playing children, Health Area 20 has long been called the "Sore Spot" of East Harlem.

Within the 28 square blocks (approximately 87 acres) which comprise the area, the 1930 census reported 30,696 inhabitants¹; i.e., a population density of 1096 persons per square block, or 353 persons per acre. This ratio indicated a state of congestion which was excessive even for New York City where only 5.5% of the people lived in areas in which the density of population was 300 persons or more per acre. Such a high population density in a section with tall modern apartment buildings may be compatible with a high index of health and economic well-being. But this is not the housing situation in Health Area 20.

Actually, the housing in this section is considerably below standard, as is evidenced by the prevalence of old-law tenements. Thus, in 1940, of the 646 tenements in the area, 561 were old-law, 85 were new-law, and 28 were vacant. Even the new-law tenements are far from modern in construction or provision for light and air.

But the area lacks more than mere adequate housing or sufficient room for its dense population. It has neither park nor playground...only one public and one parochial school come within its boundaries...it has no city hospital². However, Central Park and two other parks are within two blocks of the outer boundaries of the section, three public schools are immediately outside it, and the East Harlem Health Center of the Department of Health is located within the area proper. The nearest public hospital is Harlem Hospital which is located in Central Harlem. Mt. Sinai, Flower-Fifth Avenue Hospitals, Hospital for Deformities and Joint Diseases, and the J.E. Berwind Free Maternity Clinic are private institutions which are outside of the area but which serve it. There are neither day nurseries nor welfare agencies within the area although two nurseries and one child welfare agency are immediately outside it. Four churches of two different faiths are located here as are one cultural club and four moving picture houses. In contrast, however, the area has four beer gardens or cabarets, one dance hall, and ten billiard rooms.

¹This is the population base used in this study. It would appear to be sufficiently accurate since the 1940 census later reported approximately 29,000 population. Other sources such as the Real Property Inventory of 1934 (32,282) would indicate that there may have been considerable moving in and out of the district in the interim.

²Social Base Map prepared for the Mayor's Committee on City Planning, June, 1936.

*See maps inside front cover.

One cannot expect to find an economically secure, socially stable, and normally healthy people within this framework of bad housing, serious over-crowding, financial dependence, and scarcity of recreational facilities. Evidence in support of this hypothesis may be found in a study of adult and juvenile delinquency made in 1934 in nine slum areas in Manhattan.³ One of these, Area 6 in the study, was somewhat larger than but included Health Area 20. Among the nine slum areas, Area 6 ranked as follows: third in juvenile delinquency, fourth in female offenders, fifth in misdemeanants and felons, sixth in the number of arrests and petty offenders.

On the health side, Health Area 20 also carried more than its share of problems. Although it contained only 15% of the district population, it had, during the five-year period from 1933-37, 17% of the infant births, 21% of the infant deaths, 23% of the maternal deaths, and 23% of the reported cases of tuberculosis. In 1936, 25% of the district's reported cases of syphilis and gonorrhea were found in the area.

RELIEF LOAD AS AN INDEX TO THE ECONOMIC STATUS OF THE AREA

It would be desirable, in judging the economic maladjustment revealed in the present study, to compare it with similar conditions in 1930. Unfortunately, this is impossible. The Wicks Act, designed to alleviate economic distress by permitting the city to grant unemployment relief in the home, was not passed until the summer of 1931 and did not take effect until December of that year. Moreover, statistics concerning the relief caseload were kept only by city and boroughs. The general relief burden in Health Area 20 during the early years of relief, therefore, cannot be estimated. However, it is known that in 1930 unemployment was already widespread. Hence, it may be assumed that economic maladjustment was even then accentuated in a community composed largely of semi-skilled or unskilled workers.

On March 1, 1939, the date of this study, 9119 persons in Health Area 20 were receiving home relief, under 2668 separate case numbers. This was 30% of the 1930 population as compared with similar figures of 7% for the entire city and 11% for the borough of Manhattan. Thus, the home relief ratio for Health Area 20 was more than four times that of the city and nearly three times that of the borough.

Analysis⁴ of the data gathered concerning the 2668 families under consideration revealed significant facts with respect to the question of economic maladjustment in the area.

85% of the families first received relief prior to 1938.

31 of the families were even known in 1930 to the Prosser and Gibson Committees and the Mayor's Official Committee which preceded home relief as we know it today.

58% of the families had never been financially independent since the original date of receipt of public assistance.

³Halpern, I. W., Stanislaus, J. M. and Botein, B., *The Slum and Crime*, table 10, p. 57.

⁴Details of analysis available through Department of Welfare.

28% had been "off relief" only once.

10% had been "off relief" twice.

4% had been "off relief" more than twice.

During the time these families received some form of public assistance, home relief was received for the longest period. The average was 71% for all families, while the range was 100% for families accepted during the first two months of 1939 to 48% for those accepted in 1931. Work relief ranked second, or 15%, a combination of work relief supplemented by home relief accounted for 5%, and other forms of relief such as Aid to Dependent Children, Old Age Assistance, Blind Assistance, etc., represented only 1%. The remaining percentage of time was spent without any form of public assistance.

It would seem that return to economic independence is difficult for these people. Although their lack of employment provided them with sufficient time in which to seek and accept job opportunities, they did not seem to get work. The reasons are not hard to find. Some employers hesitate to employ relief recipients. In addition, during long periods of unemployment, skills are lost through disuse, inability to compete in the labor market asserts itself, and often a mental attitude of failure further handicaps the individual. Obviously, many of these people must continue to seek the solution of their problems from community resources, either public or voluntary.

POPULATION CHARACTERISTICS

If a community program is to meet the needs of the people for whom it is designed, it must be adapted to their traditions, mores, and modes of thought. These depend to a large extent on such factors as country of birth, length of residence in the United States, proportion of White and Negro persons, age distribution, and family stability.

In a community like Health Area 20, definite classifications are difficult. Many of the people are Puerto Ricans. Although this group holds American citizenship and is not in the usual sense "foreign born", it includes those born on the Island as well as those born in the States. It also includes both Whites and Negroes. The Negro group in the area, on the other hand, includes not only some Puerto Ricans but also both American and British West Indian Negroes. In the present study, all Puerto Ricans are grouped together and the Negro group is exclusive of Puerto Ricans. The classification of the 9119 persons studied is shown in Table I below:

TABLE I

Population Grouping of 9119 Persons Studied
in Health Area 20, New York City, March, 1939

<u>Population Group</u>	<u>Number of Persons</u>	<u>Per cent of Total</u>
White	1515	16.6
Puerto Rican	4196	46.0
Negro	3356	36.8
Other	38	0.4
Unknown	14	0.2
Total	9119	100.0

Comparisons with the 1930 population are difficult because a different classification was used. However, it is of interest to note that 52% of the total population was recorded in 1930 as Foreign White Stock⁵. No such groups appear in the present survey in which the White, Other, and Unknown groups total only 17%. In 1930, 28% of the population in Health Area 20 were Negroes as compared with 36.8% in the present survey population. This represents an increase of over 31.0% in the Negro group in Health Area 20. In the 1930 census, no classification of Puerto Rican was recorded and no estimate can be made of the change in this group. It is, of course, possible that the other groups do not seek home relief and that there is a resultant preponderance of Puerto Ricans and Negroes in the study data. This, however, is not the impression of workers in the district, who believe that the other groups have moved out of the area to a large extent.

Country of Birth and Citizenship

That relief recipients are not "mostly foreigners", at least in Health Area 20, was proved by the fact that nine-tenths of the survey population were citizens while an additional 1.6% held first papers. Moreover, almost seven-eighths were native born: 58% having been born in continental United States and 28% in Puerto Rico⁶. Table II shows the classification of the 9119 persons studied by country of birth.

TABLE II
Country of Birth of 9119 Persons Studied
In Health Area 20, New York City, March, 1939

<u>Country of Birth</u>	<u>Number of Persons</u>	<u>Per cent of Total</u>
United States	5318	58.3
Puerto Rico	2519	27.6
British West Indies	433	4.8
Europe	409	4.5
South America	59	0.7
Cuba	41	0.4
Other	322	3.5
Unknown	18	0.2
Total	9119	100.0

Only 14.1% of the survey population, as indicated above, were born outside of continental United States or Puerto Rico, and of these 4.5% were citizens while 1.7% held first papers.

Although there was a preponderance of native-born Americans in the area, it must be remembered that approximately one-third of them were Puerto Rican. Nor can it be denied that persons who were born in Puerto Rico and who spent their childhood there face the lack of opportunity and the serious educational and job-training limitations which exist on the island--limitations probably even more serious than those found in many foreign countries.

⁵Principal countries represented were Italy, 12%; Russia, 8%; Irish Free State, 6%; Poland, 5%; and Turkey in Asia, 4%.

⁶Puerto Ricans are native-born citizens.

Length of Residence

A program planned for a shifting, transient population must of necessity differ from one planned for a permanent, stable, and settled group. Contrary to the popular concept that thousands of people come to New York City from other sections of the country only to get the more adequate relief offered here, the study revealed that the heads of almost half of the 2668 families had resided in New York City for fifteen years or more, prior to March 1, 1939, while the heads of more than three-quarters of all the families had established residence in New York City prior to 1930. Only 3.4% of the White,⁷ 1.3% of the Negro,⁷ and 6.0% of the Puerto Rican⁷ family heads came to New York City after 1936. In only 25 cases had the head of the family established residence here subsequent to January, 1938.

Settlement in New York City did not end all movement for the people concerned in this study. Just as certain conditions or desires led them to seek New York as their home, so other forces sent them from house to house and section to section in this city of their choice. It was found that the length of time spent at any one address averaged 1.7 years for White families, 1.3 years for Negro families, and 0.9 years for Puerto Rican families. And the larger the family, the more frequently did it move.

It may seem odd that the Negroes and Puerto Ricans, who comprised the chief population groups in Health Area 20 and who, notoriously, have less freedom of choice of residence than other groups in New York City, should have moved so often. But the low incomes in these families, the inadequacy of the lodgings available to them and the comparatively high rents asked are the motivating forces behind their apparent restlessness and perpetual shifting from one apartment to another. These factors, also, account for the radical change in group proportions which has occurred in Health Area 20, admittedly one of the low-income areas of the city, since 1930. In confirmation of the foregoing, the study showed that while almost one-fifth of the White families moved ten or more times up to 1939, more than a quarter of the Negro families and two-fifths of the Puerto Rican families moved the same number of times during the same period. On the other hand, more than half of the White families moved only five times or less up to 1939, while a little more than one-third of the Negro families and slightly less than a quarter of the Puerto Rican families moved so infrequently up to the date of the study.

The obvious conclusion is that of all the groups involved in the study the Puerto Ricans moved most frequently and stayed the shortest length of time at any one address. Chenault states that "the Puerto Ricans in the Harlem sections are provided with poorer housing facilities than many of the other groups in the City."⁸

Size of Family - Ratio of Adults to Children

Another popular belief was proved to be fallacious as a result of this study. Relief families are not large nor do they consist of many young

⁷The terms "White family", "Negro family", "Puerto Rican family", indicate only that the head of the family belongs to the particular group. All or some of the other members of the family may be of the same or different groups although the records indicated a negligible number of mixed families.

⁸Chenault, Lawrence R., *The Puerto Rican Migrant in New York City*, p.107.

children. The average size of the 2668 families in Health Area 20 was 3.42 persons per family. Of these, 1.86 were adults, i.e., 16 years of age or over, while 1.56 were children, i.e., under 16 years of age. The average size of the families was almost identical with that of the city-wide relief case load as of March 1, 1939, but there were more children in the survey families. On the whole, the Puerto Rican families were larger than the White or Negro families and contained more children. The White families contained the smallest number of children.

The preponderance of children in the Puerto Rican families is not surprising in view of the fact that more than two-fifths of the entire population in Puerto Rico in 1930 were children under fifteen years of age, while less than three-tenths of the population in continental United States were in this age group.⁹

Age and Sex

At this point a consideration of the age and sex of the individuals comprising the families studied should be interesting. The average age of the 9119 in the survey population was 24.0 years, while half of them were under 18.6 years of age. According to the 1930 census, the average age of the New York City population was 29.5 years while half of the people were under 28.5 years. The median age of the children¹⁰ was 8.1 years and of the adults, 36.1 years.

The extreme youth of the Puerto Rican population in the area was emphasized by a study of the ages in the various population groups. The average age for the White population was 29.2 years as against 24.2 years for the Negroes and 22.0 for the Puerto Ricans. Only two-thirds of the White persons, comprising 16.6% of the population, were under 40 years of age, whereas more than three-quarters of the Negroes, comprising 36.8% of the population, and almost seven-eighths of the Puerto Ricans, comprising 46.0% of the population were under 40. Furthermore, the average age of the Puerto Rican adult was 35.9 years, while that of the Negro adult was 37.3 years, and of the White adult, 40.3 years. The Puerto Rican children were, on the average, a year younger than the White children and slightly less than half a year younger than the Negro children.

Some explanation of the low average age in Health Area 20 may be derived from the fact that it was populated largely by Puerto Ricans and that the ratio, for this group, of children under five to the women from 20 to 44 years of age¹¹ was .635, almost twice that of the New York City ratio in 1930. For the five-year period, 1933-1937, the average birth rate of 40.4* in Puerto Rico was three times that of the New York City birth rate for the same five-year period.

The general youthfulness of the entire group studied indicates that the depression affected the young as well as the old. It deprived the former of economic security and denied them, in their most employable years, the opportunity to contribute to the economic well-being of the country.

⁹Chenault, Lawrence R., op. cit., p. 28

¹⁰As defined by the Department of Welfare, a child is one who is under 16 years of age; an adult is one who is 16 years of age or over.

¹¹These are the years of greatest fertility in women.

*Per 1,000 Population

The composition of Health Area 20, by sex, has changed significantly. Undoubtedly, the radical change in population groups in the area accounts in some measure for this fact. In 1930, 51.8% of the population in the area were males. In the present survey, males represented only 45.3% of the total persons. The largest number of males was found in the White population while the smallest was found among the Puerto Ricans. The average age of all the males in the survey population was only 22.8 years as compared with the 1930 census figure for New York City of 29.4 years. The average age of the women, who comprised more than half of the survey population, was 25.0 years. Thus, on the average, the women were more than two years older than the men. The 1930 census figure for New York City indicated a mean average age for females of 29.5 years or only .1 years more than the males in the city at that time.

In a relief case load it is not unusual for the female sex to predominate. Many families are broken up by the departure of the older male member, frequently the father, from the family. The women and children who are left usually find it necessary to seek public assistance and, therefore, appear to a disproportionate extent, as was the case in this survey. Moreover, the preponderance of Puerto Ricans in the survey population bears a direct relationship to the fact that the major sex group was female because, beginning with 1918, three-fifths of the Puerto Ricans who migrated to the United States and established residence in New York City were female.

Stability of Family

Size of family and relative proportions of adults and children do not, of course, remain stationary. Numerous factors bring about changes: birth, death, and marriage; departure from the home of the parents for family or economic reasons; return to the home because of economic necessity; doubling up of formerly independent families or individuals.

In more than half the cases studied no net change in the size of the family occurred since first acceptance on relief. This lack of change does not per se indicate stability; it may mean only that an equal number of persons left or were added to a given family. In 27.3% of the families there was a net increase in size while in 21.7% there was a net decrease.

Increases in families result from the addition of individuals to the household and from births in the family. Of the total number of families 34.3% had persons added since first acceptance for relief, while 27.2% had additions due to birth. The largest number of increases occurred in the Puerto Rican families; in 40.4% they were caused by persons joining the family group, while in 31.7% they resulted from births. The White families had the smallest number of increases; 21% and 17%, respectively. Among the Negro families, 34% had additions of individuals while 28% had increases due to births.

Decreases in families result from departure from the household and from death. About three-tenths of all the families had decreases resulting from departures while less than one-tenth had decreases resulting from death. The Puerto Rican families had the highest percentage of decreases due to departure while the White families had the lowest. The percentage of decreases due to departure was almost the same for the Negro and Puerto Rican families, or slightly more than 30%.

The highest percentage of decreases due to death occurred in the Negro families with the Puerto Rican and White families following in the order given. The variation was small since the percentage of deaths was 8.6% for Negro families, 7.3% for Puerto Ricans and 7.0% for Whites. This high percentage of deaths among the Negro families is interesting in the light of the fact that the Puerto Ricans had the largest percentage of families with additions due to birth and there is a high infant mortality rate among them.

Marital Status

Desertions, separations, divorces, and deaths affect the general economic status of the family and play their parts in the psychological and social maladjustment of the parents and children. Family disintegration is frequently caused by financial difficulties which have brought about conflict and discord. Thus, broken families are commonly both the cause and result of economic dependency. Moreover, lack of economic security prevents many persons from assuming family responsibility and results in a large group of unmarried or unattached persons.

Of the 2668 heads of families, 296 were single. Table III below shows the per cent of families by color and marital status of the head of the family.

TABLE III

Color and Marital Status of the Heads of the 2668 Families Studied
in Health Area 20, New York City, March, 1939

<u>Marital Status</u>	<u>Per Cent of Family Heads</u>			
	<u>Total</u>	<u>White</u>	<u>Negro</u>	<u>Puerto Rican</u>
	100.0	100.0	100.0	100.0
Single	11.1	16.8	8.2	10.9
Married (includes common-law marriages)	44.0	46.6	42.2	44.1
Widowed	15.6	16.4	17.2	14.0
Divorced, Separated, Deserted	24.6	17.5	28.5	24.6
Unmarried Mothers and Unmarried Couples	4.5	2.3	3.6	6.3
Unknown	0.2	0.4	0.3	0.1
Average age of family heads in years	42.5	47.6	43.2	39.7

While the White group had the greatest percentage of single unmarried heads of families, it is interesting to note that the average age of the heads of White families was highest. The Puerto Ricans, with the lowest average age of family heads, did not have the highest percentage of single heads. Moreover, the Puerto Ricans had a higher percentage of married heads than the Negroes whose average age was 3.5 years higher, and had almost as large a percentage of married heads as the Whites, the average age of whose heads was 7.9 years higher. Undoubtedly, customs among certain groups are responsible for this--some marrying young regardless of economic conditions

and others not marrying because of the group attitude towards persons who marry without being in a position to provide for their families.

Of the 4949 adults in the study, 1201 were single. Table IV below shows the per cent of individuals by color and marital status.

TABLE IV

Color and Marital Status of 9119 Persons Studied
in Health Area 20, New York City, March, 1939

<u>Marital Status</u>	<u>Per Cent of Persons</u>			
	<u>Total</u>	<u>White</u>	<u>Negro</u>	<u>Puerto Rican</u>
Total	100.0	100.0	100.0	100.0
Single	24.3	31.8	24.4	20.7
Married (includes common-law marriages)	47.2	46.6	44.4	49.7
Widowed	10.0	9.7	11.0	9.3
Divorced, Separated, and Deserted	14.1	9.7	16.2	14.5
Unmarried mothers and unmarried couples	4.1	1.8	3.7	5.5
Unknown	0.3	0.4	0.3	0.3
Average age of adults in years	37.3	40.3	37.3	35.9

Contrary to what would normally be expected, the Puerto Ricans, with the youngest average age, had the lowest percentage of single persons and the highest percentage of married persons. The Negro group had the highest percentage, 11.0%, of widowed persons despite the fact that the White group had the highest average age. The percentage of widowed persons among the Whites and the Puerto Ricans was almost the same, 9.7% and 9.3%, respectively. The Puerto Ricans, a relatively youthful group, would not be likely to contain a large group of widows and widowers in spite of the high incidence of serious diseases among them. Moreover, many of the Puerto Ricans may have assumed new marriage relationships after the death of their former mates and their widowed status may, consequently, have changed to "married".

The lowest percentage of divorces, separations, and desertions was found among the White persons; the highest among the Negroes. Most of these persons were in the separated and deserted classifications--the usual poor man's divorce and frequently his only solution for economic worries. It is, therefore, not surprising to find the highest percentages in the two most underprivileged groups--Negro and Puerto Rican.

The highest percentage of unmarried mothers or members of unmarried couples was found among the Puerto Ricans. These non-legal relationships on the part of the Puerto Ricans are undoubtedly carried over from Puerto Rico where illegal or consensual relations are prevalent.¹² Moreover, such relationships are entered into frequently by persons of all groups whose economic insecurity makes them hesitate to take over the burdens of permanent family ties.

¹²Chenault, Lawrence R., *op. cit.*, p. 48.

INCOME AND BUDGET

Although the New York City relief grants are the highest in the United States today, they admittedly provide only a subsistence standard of living. Earlier in this paper an attempt was made to answer the charge that persons come to New York City because of the more adequate relief. An examination of the annual incomes of the families on relief in Health Area 20, while keeping in mind the fact that the dollar buys relatively less in New York City than in most other sections of the country, adds weight to the previous rebuttal.

The average annual cash income for the 2668 families amounted to \$652 per family. This amount was composed of two items: an average annual home relief grant of \$548 paid by the city, and an average annual income of \$104 from other sources. Of the total number of families, 755 received additional income from sources other than home relief. For these 755 families the average annual cash income was \$808, of which \$422 was the average annual home relief grant and \$386 was the average annual income from other sources. For the 1913 families whose only source of income was the home relief grant, the annual grant averaged \$592.

Families with sources of income in addition to home relief allowances averaged 4.08 persons, while the families which were receiving no income other than the home relief grant averaged 3.16 persons. Since "in other sources of income" are included income from private industry, from other forms of public assistance, from private agencies, from boarders and lodgers, etc., it is evident that the larger the family the greater the probability that it will be receiving an additional income from one or more of these sources. This accounts for the relative size of the two types of family.

The figures cited are based on data that were valid in March, 1939.¹³ The average home relief grant per case for the entire city for that month was \$41.42 while the average size of family was 2.95 persons. On an annual basis, the average cost per case was \$497. The higher grant per case on home relief in Health Area 20 can be attributed to the relatively larger family of 3.42 persons in this health area. Thus, the average annual home relief grant per person in the area was \$160, while the corresponding average for the city was \$168.50.

It is the general experience of the Department of Welfare that an increase in the size of family is accompanied by a decrease in the relief cost per person. The value of surplus commodities, WPA- and cash-clothing and free medical services has not been taken into account in the preceding nor in subsequent calculations. It is estimated that their value is approximately \$94 per annum for the family of average size in Health Area 20, or the equivalent of \$27.41 per person per annum.

¹³The home relief grant itself has been revised since the date of this study and now includes monthly grants for clothing and personal needs. The Federal Food Stamp Plan sponsored by the Surplus Marketing Administration of the United States Department of Agriculture was instituted in March, 1940, and has had the effect of increasing the home relief food allowance by approximately fifty percent.

Below is shown the percentage distribution by different sources of all income not derived from home relief:

Total.....	100.0
Private industry.....	18.0
Boarders and lodgers.....	9.5
WPA.....	32.3
NYA and CCC.....	5.7
OAA, BCW, Blind.....	10.8
Combinations of above and all other sources.....	23.7

More than half of the income in the last designation, "Combinations of above and all other sources", was derived from various forms of public assistance other than home relief. Altogether, more than 60% of the income from sources other than home relief came from the funds of other public assistance programs.

Average Annual Cash Incomes

Of the average annual cash income of \$652, \$322 was allocated for food and \$284 for rent. Rent took 43.6% of the total cash income. Assuming that all of the food allowance money was actually spent on food,¹⁴ this item accounted for almost half of the total cash income, namely, 49.4%. The remaining \$46, or 7%, was allocated for all other necessities, mainly utilities. It must again be noted that medical services, special clothing grants, surplus commodities, etc. were not included in this average annual cash income.

The weekly cost of "an inexpensive but adequate diet", at 1936 prices, was estimated by the Department of Agriculture, for the northeastern part of the country, at \$2.70 per person per week, i.e., \$11.70 per person per month.¹⁵ In Health Area 20, the average food allowance per person was \$7.85 per month. This allowance for food was, thus, only two-thirds of the minimum standard. If the average monthly value of surplus commodities under the Food Stamp Plan were added to this average food allowance, the total food grant would average \$12.00 per person per month, or practically the same as the standard set by the Department of Agriculture in 1936.¹⁶ For a child under 16, an extra \$1.80, the value of free milk given such child, must be added to this average.

¹⁴This is frequently not the case since sums are used to supplement rent grants, to pay carfare, to buy clothing when home relief funds are unavailable for full clothing needs, to buy household necessities, hair cuts, etc. Although the Department of Welfare does not approve of this practice, it is powerless to prevent it.

¹⁵Stewart, Maxwell S., How We Spend Our Money, Public Affairs Committee, Inc., New York, 1938, p. 31.

¹⁶It may be assumed that the increase in food costs since 1936 would necessitate an increase in the Department of Agriculture's estimate of the cost of "an inexpensive but adequate diet" although no such estimate based on present food prices has been published as yet. Moreover, it may be assumed that the increase in food costs would decrease the purchasing power of the home relief food grant. Consequently, despite the fact that the Department of Agriculture's 1936 estimate and the average food grant per relief recipient in Health Area 20 are practically identical, the variations resulting from increased costs must be considered.

The following table is a section of one presented in the National Resources Committee Report on "Consumer Incomes in the United States", showing the percentage distribution of non-relief families of two or more persons by income level for the year 1935-1936.¹⁷ To this table has been added a percentage distribution of the home relief families of two or more persons by income level in Health Area 20 in March, 1939.

Income Level	Per Cent of All Families in Income Range in National Resources Committee Report	Per Cent of All Families in Income Range in Health Area 20
Under \$250	2.8	0.1
\$250 to \$500	7.8	7.6
\$500 to \$750	11.3	46.8
\$750 to \$1000	13.4	33.0
\$1000 to \$1250	13.2	9.6
\$1250 and over	51.5	2.9

In the preceding table, the average annual value of surplus commodities, clothing, and medical services was again excluded from the income. However, it should not be forgotten that even families who are not on relief, particularly those in the lower income brackets, are frequently the recipients of free medical services, gifts from friends or relatives of articles of clothing, meals, etc.

It will be observed that, whereas slightly more than one-fifth of the non-relief families had income levels under \$750 per annum, more than half the relief families in Health Area 20 were within this range. Also, while slightly more than one-third of the non-relief families had income levels under \$1000 per annum, seven-eighths of the home relief families in Health Area 20 were within this income range. If consideration is given to the fact that the average number of persons per family in the National Resources Committee Study was 3.9 and in the Health Area 20 study, 4.4, when single-person families are excluded, the differences are even more pronounced.

Income, Health, and Family Size

The following table shows the average annual cash income for the home relief families in Health Area 20 by the average size of family and by health conditions existing in the family:

¹⁷National Resources Committee, *Consumer Incomes in the United States, Their Distribution in 1935-1936*, Washington, D.C., United States Government Printing Office, 1938, Table 5, p. 22.

TABLE V

Average Annual Income and Health Conditions in the
2668 Families Studied in Health Area 20, New York City
March, 1939

	Number of Families	Average Annual Cash Income	Average Number of Persons in Family
All Families.....	2668	\$652	3.42
Families having no cases of chronic illness.....	747	609	3.12
Families having one or more cases of chronic illness.....	1921	668	3.53
Families having one or more cases of Tuberculosis.....	280	753	4.12
Families having one or more cases of venereal disease.....	457	657	3.44
Families having one or more cases of mental and nervous diseases...	174	680	3.47

It may appear from the foregoing table that the 280 families having one or more cases of tuberculosis had a larger average annual income than that of the other families listed therein. Although this annual income of \$753 was \$73 higher than the next largest annual income, it should not be assumed that it was due entirely to the granting of extra allowances for special diets because of illness, but rather to the fact that these families had the largest number of members. The average annual grant per person for a special diet was \$36, and to only 55 of the 361 persons with tuberculosis were such diets granted. The above incomes computed on a per person basis are as follows:

	Average Annual Cash Income Per Person	Average Number of Persons in Family
All families.....	\$191	3.42
Families having no cases of chronic illness.....	195	3.12
Families having one or more cases of chronic illness.....	189	3.53
Families having one or more cases of tuberculosis	183	4.12
Families having one or more cases of venereal disease.....	191	3.44
Families having one or more cases of mental and nervous diseases.....	196	3.47

As a rule, the average cash income per person should vary inversely with the size of the family. This was borne out in all of the above situations except in families in which there were cases of mental and nervous disease. Here, the average of \$196 was slightly above that of the expected

figure, but since the variation was less than 3%, it may be disregarded. Thus, the income figures per person were practically constant.

The budget allowances for all families in this study were calculated according to the uniform procedure of the Department of Welfare. The family problems of chronic illness and the type of chronic illness were not taken into consideration in estimating basic budgetary needs. Such health problems are cared for by clinics and hospitals and by the Department of Welfare chronic care service for non-ambulatory patients, but are not considered on a budgetary basis except when special diet allowances are requested or when, in certain cases, rent allowances above the normal grant are provided.

EMPLOYABILITY AND OCCUPATION

Lack of training and education, of course, may hinder the employment possibilities of any group of persons, White or Negro, American or foreign, but unless serious illness makes any form of work impossible, such persons, given the opportunity, could undertake some type of productive activity.

Of the 4949 adults in the study, 60.7% were fully employable, i.e., not prevented from working through any physical or mental handicap; 25.8% were limited in their employment possibilities because some physical handicap prevented them from undertaking certain types of employment; and 13.5% were totally unemployable. Comparable figures based on a study of the home relief population made by the Department of Welfare in 1937 showed less than 1% difference in the proportion of fully employable adults.¹⁸

Among the three major groups in this study, little variation in the employability rates of the adults was shown. The Puerto Ricans had the highest percentage of fully employable adults (61.4%), although they showed an employability rate that was 1.6% above that of the Negroes (59.8%) and only .4% above that of the Whites (61.0%), in spite of the fact that the average age of Puerto Rican adults was 4.4 years lower than that of the White adults and 1.4 years lower than that of the Negro adults. Thus, factors other than age must be sought to explain this similarity in employability rates. General lack of skill, lack of education and training, and serious health problems undoubtedly must be taken into consideration.

The greatest employability occurs, naturally, in the youngest adult age group. Seven-eighths of the persons in the age group 16 through 24 years were fully employable. Moreover, the fully employable in this age group constituted about three-tenths of all of the fully employable adults.

Since the average age of the heads of White families was the highest, 47.6 years, it was to be expected that the percentage of heads of families who were fully employable and of limited employability would be lowest for this group, while for the Puerto Ricans with the youngest heads of families, 39.7 years, the percentage would be the largest. This is borne out by the figures which show that the percentage of fully employable and limited

¹⁸A remarkable degree of similarity exists between the two studies, particularly in relation to employables, in view of the fact that the 1937 study was based on a representative sample of the entire home relief population, whereas the survey population is limited to one geographic area in the city.

employable heads was only 78.8% for the heads of white families but was 84.6% for the heads of Puerto Rican families. Conversely, the lowest percentage, 15.4%, of totally unemployable heads was found among the Puerto Ricans, while the highest percentage, 21.2%, was found among the heads of White families. A table showing the percentage distribution for employable, limited employable, and unemployable heads of family, by group, follows:

TABLE VI

Employable, Limited Employable and Unemployable Heads of
the 2668 Families Studied in Health Area 20,
New York City, March, 1939.

	Percentage of Heads of Families			
	Total	White	Negro	Puerto Rican
Employable	49.1	48.0	48.0	50.3
Limited Employable	33.2	30.8	33.2	34.3
Employable and Limited Employable	82.3	78.8	81.2	84.6
Unemployable	17.7	21.2	18.8	15.4
Average Age	42.5	47.6	43.2	39.7

Industries

Most of the 4280 employable and limited employable adults had had some previous work experience in what they considered their normal occupations. The distribution, by industries, for this normal work experience was as follows:

TABLE VII

Industrial Distribution of the Fully Employable
and Limited Employable Adults Studied in Health Area 20,
New York City, March, 1939.

	Fully Employable	Limited Employable
Number of persons	3005	1275
Total per cent	100.0	100.0
Building & Construction	4.0	5.3
Clerical & Commercial	2.0	2.7
General Industries ¹⁹	15.4	20.3
Metal Trades	1.0	1.1
Needle Trades	9.0	8.9
Professional & Technical	0.9	0.7
Service Industries ²⁰	23.5	34.8
Transportation & Communication	2.9	3.4
Miscellaneous Occupations	5.9	8.2
Undetermined	3.5	2.8
None	31.9	11.8

¹⁹According to the New York City Department of Welfare Manual of Occupational Classifications, revised July, 1937, "General Industries" include, among other things, cannery workers, bakers, confectionery workers, cleaners and dyers, brick workers, printers, laundry workers, teamsters, lampshade workers, brush and broom workers, etc.

²⁰According to the New York City Department of Welfare Manual of Occupational Classifications, revised July, 1937, "Service Industries" includes domestic service in the home, and the hotel and restaurant services.

An occupational inventory taken in January, 1940, of all adults receiving home relief who were eligible for WPA employment showed some important differences in the industrial distribution of the relief recipients in the city as a whole and in Health Area 20.

A larger proportion of the adults in the Occupational Inventory had normally been employed in the Commercial and Clerical, and Professional and Technical categories--both of which require education and training. Of the total employables in the inventory, more than one-eighth were in the Clerical and Commercial group in contrast to only 2.2% of the total employables in Health Area 20, while Professional and Technical skills accounted for 4.3% in the inventory and only 0.8% in the Health Area 20 study. In other words, the adults in the Health Area were a less educated, less trained, less skilled group, and thus had fewer employment possibilities and lower earning capacity than the relief population in general. This probably results from the fact that the area is populated largely by Puerto Ricans and Negroes who, in general, are faced with employment handicaps not only because of racial discrimination but also because they have had little or no opportunity to acquire training and education.²¹

A comparison of the two sets of figures in the preceding table reveals a very striking difference in the percentages for the "None" group, i.e., those who had no normal or usual occupation or who had never worked. The figure for fully employable adults was nearly three times that for adults of limited employability. The reason for the difference appears to be the relative age distribution of the two groups. Thus, more than two-thirds of the fully employable adults who claimed no normal occupation were in the age group, 16 through 24 years, a group with little or no chance for employment during the depression, while less than two-fifths of the limited employables who had no normal occupation were in this age group.

Another significant difference appears among those whose normal occupation was in the Service Industries where there were approximately one and one-half times more limited employable than fully employable persons.

If the industry distributions were adjusted by omitting the "None" and the "Undetermined" groups, the adjusted figures would reveal that the normal occupations of approximately three-quarters of the fully and limited employable adults who had had definite work experience were in the three major industrial groups of General Industries, Needle Trades, and the Service Industries. Half of them concentrated in the latter two industrial groups and almost two-fifths of them were in the Service Industries alone. The large number of Puerto Ricans and Negroes probably accounts for this.

About two-fifths of the fully employable adults were male and three-fifths female. The limited employable adults were almost equally divided among male and female.

Of the fully employable women, 36% had no work experience as against

²¹Chenault, Lawrence R., *op. cit.*, p. 76, points out that one of the greatest handicaps of the Puerto Rican worker is lack of skill.

Similarly, it may be pointed out that the Negro adult who has migrated from the South after childhood usually has had little or no training or education.

26% of the men. For the limited employables the figures were 18% and 5%, respectively.

Adjustment of the figures to omit the "none" and "unknown" groups revealed that almost half of the fully employable men had had work experience in the General Industries, Needle Trades and Service Industries classifications. On the other hand, more than nine-tenths of the women had had work experience in these groups. Moreover, while 23.6% of all fully employable women had been in the Needle Trades, only 1.9% of the fully employable men had worked in these trades. It is probable that these variations result from the fact that "Needle Trades" include such occupations as embroidering, knitting, crocheting, lampshade making, etc.--occupations in which Puerto Rican women, who are found in large number in Health Area 20, are skilled.

While a considerable percentage of the fully employable men had had their normal work experience in the service industries, a much larger percentage of the fully employable women had worked in this field. The service industries include, among others, all types of private domestic service, work customarily undertaken by Negro women.

The same general trend in relation to past work experience held in the case of adults of limited employability, except that a higher percentage of men than of women had been employed in general industries.

In general, the industrial analysis indicated that employment opportunities for the women were more restricted than for the men.

HEALTH CONDITIONS

GENERAL HEALTH CONDITIONS

Chronic disease has been called the "Unseen Plague".²² Chronic ailments, because of their insidious onset and low mortality rates, tend to escape the limelight they deserve. But they are of profound economic significance not only because of the enormous financial burden they impose upon the general public but also because of the heavy toll they exact in energy and strength which otherwise might be directed into more fruitful economic and social channels. Boas ^{22a} has stated that there is a reciprocal relationship between chronic disease and poverty; prolonged illness leads to destitution, and want breeds disease.²³ Boas believes that chronic disease ranks with old age and unemployment as a factor affecting social security and points out that there is hardly a family one member of which is not stricken by some chronic ailment.

The problem of chronic disease has become one of primary importance in recent years not only because we have an aging population but also because we have learned how to control the acute diseases more successfully. This growing interest in chronic disease is manifested by the numerous comprehensive surveys of disease incidence in population groups which have been made in recent years. In 1928, the Welfare Council of New York City,²⁴ using a sample of 20,754 persons, attempted to estimate the prevalence of chronic disease, exclusive of tuberculosis and mental diseases, in persons receiving care from medical and social agencies. On the basis of their findings, it was estimated that 1% of the population suffered from chronic diseases other than tuberculosis and mental diseases.*

The more extensive surveys conducted in Massachusetts²⁵ in 1929, 1930, and 1931 indicated that one-eighth of the population were the victims of chronic diseases including tuberculosis and mental disease. The National Health Survey²⁶ conducted in 1935 as a house-to-house canvass of 700,000 urban families in 18 states and 37,000 rural families in 3 states, or a total of 2,500,000 people, is not only the most extensive mass survey made thus far in the United States but also is considered the most representative

²²Boas, Ernst P. *The Unseen Plague; Chronic Disease*. New York. J.J. Augustin, 1940.

^{22a}Ibid, p. 121.

²³Grotjahn, Alfred

Krankenhauswesen und Heilstättenbewegung im Lichte der sozialen Hygiene VIII, 406 p.p. 8, Leipzig - F.C. Vogel, 1908.
Sociale Pathologie - Versuch einer Lehre von den sozialen Beziehungen der menschlichen Krankheiten als Grundlage der sozialen Medizin.
Berlin, A. Hirschwald, 1915, XII, 532 p. 8.

²⁴Jarrett, *Chronic Illness in New York City*, Columbia University Press, 1933.

²⁵Bigelow, G. H. and A. M. Lombard, *Cancer and Other Chronic Diseases in Massachusetts*, Houghton Mifflin and Company, 1933.

²⁶National Health Survey (1935-1936), Magnitude of Chronic Disease Problem in the United States. United States Public Health Service, Washington, D.C., 1938.

*It should be noted that Dr. Charles F. Bolduan, Director of the Bureau of Health Education of the New York City Department of Health, has estimated that diabetes exists in about 1% of the New York City Population.

on a national scale. The findings made possible an estimate of chronic disease in almost one-fifth of the population of the United States.

CHRONIC ILLNESS

Comparison with The National Health Survey and Other Studies

In the study made in Health Area 20, 2863 of the 9119 persons involved were found to have 3653 cases of chronic disease. Thus, nearly one out of every three individuals suffered from one or more specific types of chronic ailment while for every 100 persons there were 40 cases of chronic disease. A comparison of these findings with those in the surveys already discussed serves only to highlight the magnitude of the health problems in Health Area 20, while the relative youthfulness of the area's population renders those problems especially significant.

Excluding the figures relative to venereal disease, as was done in the National Health Survey, it was found that one-quarter of the survey population in Health Area 20 had some form of chronic disease as against the 17.7% estimated for the United States.²⁷ On the same basis, there was an incidence of 34.1 cases of chronic disease per 100 persons in the area as compared with the National Health Survey figures of 28.2 per 100 persons. A comparison of the age specific rates emphasizes the variation in incidence even more strongly.²⁸

TABLE VIII

COMPARISON OF NATIONAL HEALTH SURVEY* AND HEALTH AREA 20 INCIDENCE OF CHRONIC DISEASE BY AGE GROUP

<u>ALL AGES</u>	<u>1. % N.H.S.*</u>	<u>2. % HEALTH AREA 20 TOTAL INCIDENCE</u>	<u>3. % INCIDENCE H.A. 20 LESS VENEREAL DISEASE</u>	<u>4. **COLUMN 3 COLUMN 1</u>
	17.7	31.4	25.5	1.4
0 - 4	3.4	7.3	6.7	2.0
5 -14	6.8	15.6	15.1	2.2
15-24	8.3	21.6	16.9	2.0
25-34	15.9	46.7	35.6	2.2
35-44	22.1	52.4	40.5	1.8
45-54	27.3	64.5	52.2	1.9
55-64	34.4	57.3	51.1	1.5
65-74	46.7	65 and over 42.4	41.8	.9
75-84	51.4			
85	60.0			

*From the National Health Survey, 1935-36 -- Magnitude of Chronic Disease Problem in the United States -- Preliminary Reports, Appendix B.

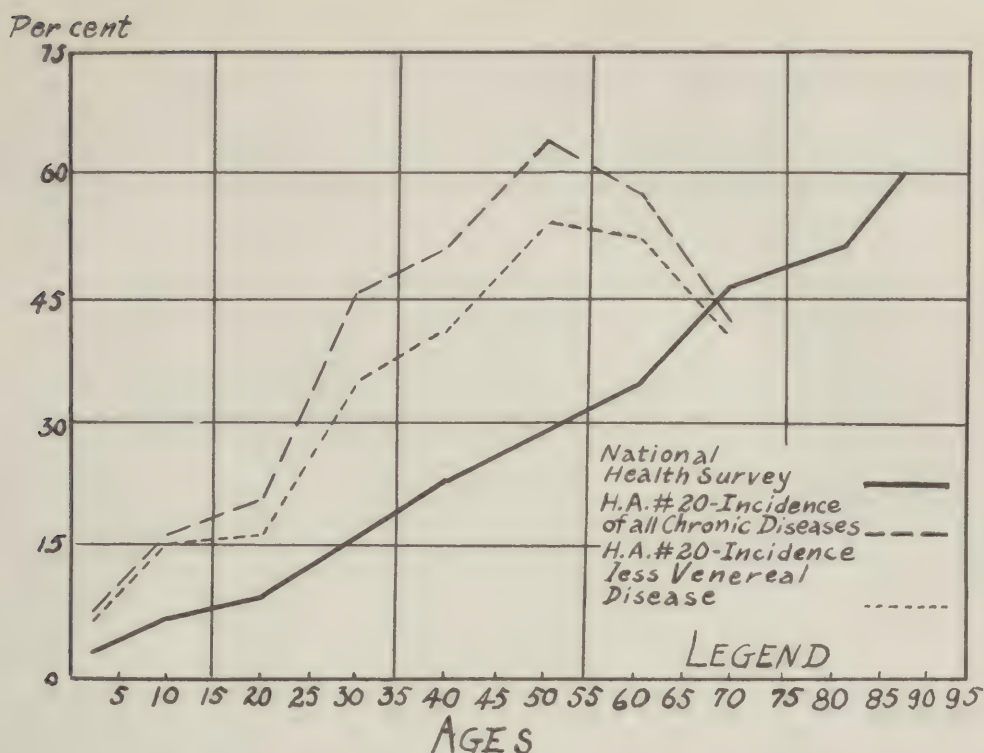
**Column 3 divided by Column 1.

²⁷See Table VIII, p. 19.

²⁸See Table VIII, p. 19 and Figure 1, p. 20. Cf. also National Health Survey, *op. cit.*, App. B.

COMPARISON OF NATIONAL HEALTH SURVEY* AND HEALTH
AREA 20 - INCIDENCE OF CHRONIC DISEASE BY AGE GROUP

FIGURE 1



*National Health Survey, 1935-1936 -- Magnitude of Chronic Disease
Problem in the United States -- Preliminary Reports, Appendix B.

The rates in Health Area 20 were constantly and significantly higher in the age groups to 65, varying from 1.5 times the National Health Survey rate in the age group 55-64 to 2.2 times the rate at the ages 5-14 and 25-34.

Incidence - Age and Sex

As has been found true, generally, chronic disease was more prevalent among the males than among the females in this study; i.e., 32.9 per 100 in the male as compared with 29.8 per 100 in the female population. The incidence of this type of disease in the various population groups²⁹ in the area studied was almost identical; approximately one-third of the persons in each group suffered from some form of chronic ailment. This similarity of rates among the three main population groups in the area stopped, however, at incidence for all types of chronic diseases. As will be shown, there were marked differences in the prevalence of the various forms of chronic disease in the several population groups.

²⁹The three main population groups in the survey population were White, Negro, and Puerto Rican. The latter group includes all Puerto Ricans both White and Negro. The Negro group is exclusive of Puerto Ricans. Cf. p. 8 supra.

Although the detailed findings with respect to each of the various types of chronic disease suffered by the survey population in Health Area 20 will be discussed seriatim, it may at once be said that the venereal diseases were the most prevalent of all the chronic ailments found, while the cardiovascular diseases ranked second and tuberculosis, strikingly enough, ranked third. Nervous and mental diseases, cancer and other tumors, and diabetes ranked next in importance in the order given. The diagnoses of venereal disease and tuberculosis were verified by checking clinic records in the Health Department Clinics.- Table IX shows a comparison of the number and percentage of chronic diseases found in this study and in the National Health Survey.

TABLE IX

Comparison of National Health Survey and Health Area 20 in Number of Cases of Chronic Diseases

<u>Disease</u>	<u>Health Area 20</u>		<u>National Health Survey</u>	
	<u>No. of Cases of Chronic Disease</u>	<u>Cases per 100 persons</u>	<u>No. of Cases of Chronic Disease</u>	<u>Cases per 100 persons</u>
All Chronic Disease	3653	40.1 (34.1*)	36,750,000	28.3
Venereal	539	5.91	not included	
Cardiovascular	516	5.65	7,840,000	6.00
Tuberculosis	361	3.95	680,000	.53
Nervous & Mental	182	2.00	1,450,000	1.16
Cancer & Other Tumors	62	.68	930,000	.71
Diabetes	53	.58	660,000	.50
Other chronic diseases	1940	21.27	25,190,000	19.38

*This figure does not include Venereal Diseases and is placed here so that it may be compared with that of the National Health Survey.

SPECIFIC DISEASES

Venereal Diseases

Although the National Health Survey did not include the venereal diseases, it has been estimated that syphilis is the second most common disease in the country and that it affects 4.6% of the United States population.³⁰ In Health Area 20, the 539³¹ cases, or 5.9% of the study population, included all types of venereal diseases. Seven-eighths of these cases were in the age groups 20 through 54.

³⁰This estimate is based on a study by the United States Public Health Service of six million cases of syphilis in the United States. Cf. also, Parran, Thomas, M.D., Surgeon General of the United States Public Health Service, *Shadow on the Land*.

³¹539 of the 9119 individuals admitted having a venereal disease. The data given was checked with records of the Health Department Clinics and of other clinics when indicated and only confirmed diagnoses were included in the statistical tables.

The incidence of these diseases among males and females in the study population was consistent with the findings of the New York City Department of Health study based on an analysis of 128,849 premarital Wasserman tests done in 1939.³² In both studies there was a higher incidence among males than among females. Thus, in Health Area 20, the incidence was 6.2% for the males, 5.7% for the females. In the Health Department study, it was 2.04% and 1.47%, respectively.³⁵

From the aspect of population groups, the highest incidence, 6.9%, was found among the Puerto Ricans in Health Area 20. The incidence among the Negro and White groups was 6.04% and 2.9%, respectively.³³ These figures do not show the same degree of difference as was shown in a study of 8600 Wassermans done by the Bureau of Social Hygiene on a group of NYA students in 1939.³⁴ In the latter study, the incidence among the Negroes was nearly seven times that of the Whites. It must be remembered, however, that the foregoing percentages related solely to syphilis. If the total venereal disease incidence were considered, the rates in the Social Hygiene study might be increased one-third.³⁵

The findings in the present study probably are incomplete since only verified cases were included. For this reason, and also because of the small number of cases considered, further analysis of the population group incidence does not seem warranted.

Cardiovascular Diseases

The National Health Survey ranks these diseases first although they rank only second in the present study. It must be remembered, however, that the venereal diseases were excluded from the final compilation of the National Health Survey. Actually, the figures for this type of chronic ailment were similar in both studies. Thus, 5.65% of the survey population in Health Area 20 were afflicted with some form of cardiovascular disease as compared with the estimated 6.0% for the United States population (Table IX, p. 33).

Conforming to experience elsewhere, the majority of the 514 persons in the present study who suffered from this type of disease were over 40 years of age. Although the age groups of 40 and over comprised only one-fifth of the survey population, they were responsible for over two-fifths of the cases of chronic diseases, and one-sixth of all individuals over 40 had some form of cardiovascular disease.

Analysis on the basis of population groups confirms the fact that the incidence of these diseases was linked closely to age distribution. For example, among the Puerto Ricans in Health Area 20, who have larger numbers

³²Quarterly Bulletin, Vol. IX, No. 2, May 1941, Department of Health.

³³See Table X, p. 23.

³⁴Personal communication from George Kerschner, Statistician, Bureau of Social Hygiene, January 2, 1941.

³⁵The 1939 report of the Department of Health Bureau of Records shows that in New York City during 1939 the number of new cases of gonorrhea reported was about one-third of the number of new cases of syphilis.

in the younger age groups, cardiovascular diseases affected only 4.5%, whereas, among the Whites and Negroes, with a larger proportion of the population in the older age groups, the incidence was 6.6%. While the Puerto Ricans comprised almost half of the survey population, only a little over one-third of the cardiovascular cases was found among them. The Negroes, comprising slightly over one-third of the survey group, had more than two-fifths of these cases which affected 6.6% of the Negro population.

Comprising one-sixth of the survey group, the White population had one-fifth of the cases.

To determine to what extent the rates were dependent upon the difference in population age and whether or not age was the only factor, these rates were standardized on the basis of the standard million population (United States, 1910). When this was done the White and Negro groups again were found to have closely similar rates, 7.29% and 7.47%, respectively. But the Puerto Rican rate was 5.72%, indicating a significantly lower incidence of cardiovascular disease in these people.³⁶

TABLE X

CHRONIC DISEASE BY POPULATION GROUP
AND ORDER OF PREVALENCE IN HEALTH AREA 20
NEW YORK CITY, MARCH, 1939

WHITE			NEGRO			PUERTO RICAN		
Diseases	No.	Per Cent White Population	Diseases	No.	Per Cent Negro Population	Diseases	No.	Per Cent Puerto Rican Population
Heart Disease	101	6.6	Heart Disease	224	6.6	Venereal Disease	290	6.9
Tuberculosis	50	3.3	Venereal Disease	203	6.0	Tuberculosis	246	5.9
Nerve & Mental	46	3.0	Nerve & Mental	68	2.0	Heart Disease	189	4.5
Venereal Disease	44	2.9	Tuberculosis	64	1.9	Nerve & Mental	68	1.6
Diabetes	11	.7	Cancer & Tumor	29	.9	Cancer & Tumor	27	.6

³⁶See Table XI, p. 24.

TABLE XI

CARDIOVASCULAR DISEASES - HEALTH AREA 20
STANDARDIZED FOR STANDARD MILLION
NEW YORK CITY, MARCH, 1939

		WHITE			NEGRO			PUERTO RICAN					
Age	Percentage of Standard Million Population	Number Cases	Popu- lation	Age Speci- fic Rate	Expected Cases per 100 Popu- lation*	Number Cases	Popu- lation	Age Speci- fic Rate	Expected Cases per 100 Popu- lation*				
				Rate	Rate			Rate	Rate				
0 - 4	12	-	107	-	-	1	404	.2	.02	2	589	.3	.04
5 - 9	11	14	181	1.1	.12	4	553	.7	.07	9	844	1.1	.12
10-19	20	19	385	3.1	.62	15	815	1.8	.36	26	882	2.9	.58
20-39	33	26	343	5.5	1.82	56	833	6.7	2.21	63	1228	5.1	1.68
40-59	18	18	282	18.3	3.29	130	643	20.2	3.64	80	553	14.5	2.61
60 & over	7	24	117	20.5	1.44	18	108	16.7	1.17	9	99	9.9	.65
		7.29/100 Standard Rate for Native White			7.47/100 Standard Rate for Negro			5.72/100 Standard Rate for Puerto Rican					

*The figure in this column was arrived at by multiplying the percentage of the Standard Million by the Age Specific Rate.

Tuberculosis

As has been indicated one of the most interesting findings in the present study is that tuberculosis ranked third in prevalence of chronic diseases in the studied population. However, according to the findings of the National Health Survey, tuberculosis is fifteenth in prevalence of chronic disease and has an estimated prevalence of .53% in the United States population.³⁷ New York City, which has currently on file 44,000 cases of known tuberculosis, conforms closely to the latter estimate.

While the high incidence of tuberculosis in this study is striking, it is not surprising and was anticipated on the basis of mortality rates for the area. According to preliminary 1940 census figures, the population of Health Area 20 is 28,751. This figure is the most accurate one available and is used, therefore, as a basis for estimating the 1939 tuberculosis death rate for the health area. Forty-three deaths were reported in this area during 1939, giving a death rate of 149.5 per 100,000 as compared with 89.5 for the East Harlem district and 50.3 for New York City. This means that the tuberculosis death rate of Health Area 20, in 1939, was three times as high as that of New York City as a whole and ranked with the highest found in a compilation of rates of 46 cities. Only that of San Antonio, Texas, with a rate of 152.9 exceeded it.³⁸

From 1936 to 1939, the New York City Department of Health carried out X-ray surveys of various groups. The group which consisted of Lower Harlem home relief recipients, many of whom were members of the present survey population, conformed most nearly to this survey population and showed an incidence of 7.0%: 4.1% chronic tuberculosis and 2.9% active, clinically significant. A comparison of the findings of twelve groups showed that this rate was exceeded only by the rates of three other groups: Riker's Island prisoners, furriers, and transient and homeless men.³⁹

The population make-up of the area does not entirely explain the high degree of prevalence of tuberculosis which the present study reveals. The high rate of 5.9% was expected for the Puerto Ricans but the rate of 3.3% for the White persons was significantly higher than that estimated for the entire New York City or United States populations.

The Negroes showed an incidence of 1.9%. This low figure, which seems surprising in view of the high mortality rates for tuberculosis among Negroes, is in keeping with recent survey findings. Edwards,⁴⁰ in his study on tuberculosis case findings, cites the discovery of this relatively low morbidity in the Negro population, and explains the disparity between the morbidity and mortality rates on the basis of an increased case fatality rate due to lowered resistance to the disease when it is once acquired.

Of the 361 persons who had a tuberculous infection, more than one-

³⁷See Table IX, p. 21.

³⁸New York City Tuberculosis and Health Association, *Net Tuberculosis Mortality - 46 Large American Cities, Year, 1939.*

³⁹Edwards, Herbert H., *Tuberculosis Case Findings - June, 1940.* Supplement to American Review of Tuberculosis, Vol. XLI, No. 6, Table 1, p. 5.

⁴⁰Edwards, *op. cit.*, Vol. II, Importance of Racial Factor, p. 114.

quarter were children under 15 years of age. The modal age group was 10 to 14 years. These figures for age distribution of tuberculosis cases may be compared with those included in a report, written in April, 1940, by Aronsohn and Rabinoff,⁴¹ in which it was stated that 10.0% of the new cases in the East Harlem district reported during the first quarter of 1940 were among children under 15 years of age, whereas only 3.0% of the tuberculosis cases occurred in this age group in the city as a whole. In addition, it was found that while East Harlem contributes only 5% of all the tuberculosis cases in the entire city, it contributes 17.1% of all the cases among children under 15 years of age.

Further study indicated that this high percentage among children was attributable, in part, to a relatively younger survey population rather than to a higher age specific rate. For instance, the percentage in individuals under 15 was 2.5 as compared with 5.1% in individuals 15 and over.

<u>Age</u>	<u>Cases</u>	<u>Population</u>	<u>Per Cent</u>
0 -- 14	98	3,962	2.5
15 and over	263	5,157	5.1

A comparison of the age specific morbidity rate for children under 15 in this district with the same age group elsewhere in the city cannot be made because of lack of available age group census data for 1940. A comparison of the tuberculosis mortality rates of persons under 15 with those of persons 15 and over would have little significance, since case fatality rates and other factors would affect these figures.

Of all cases of tuberculosis among Puerto Ricans, 76, or 30.9%, were among children under 15. Among the Negroes, 15 cases, or 23.4%, were among children under 15; among the Whites, 7 cases or 14.0%, were among children under 15 years of age.

There was a marked difference in age distribution of the male and female tuberculosis cases in this study. The peak incidence of 9.1% in females occurred in the age group 20 to 24; in males, the peak incidence was 10.3% and occurred in the age group 45 to 49. The total incidence among males was 4.2%; the total incidence among females was 3.8%. In the findings of an earlier peak incidence in females and a higher morbidity rate in males, Health Area 20 conformed to previous studies carried out on a large variety of population groups.

Nervous and Mental Diseases

The incidence of the nervous and mental diseases was somewhat higher in this study than that found in the National Health Survey.⁴² The 182

⁴¹Communication to Dr. Edwards, Director, Bureau of Tuberculosis from Drs. M. H. Aronsohn and S. Rabinoff on "Tuberculosis in Adolescents", 1941.

⁴²See Table IX, p. 21.

cases found were about equally distributed between the male and female population. While the incidence was high in all three population groups, it was notably so among the Whites, in which group 3.0% were affected.

The importance of these diseases was overshadowed in the present study by the marked prevalence of tuberculosis. It must, however, be remembered that, while the nervous and mental diseases do not rank high either in prevalence or as a cause of death, they constitute an outstanding cause of disability. Two-fifths of the adults in this group were classified as totally unemployable on the basis of these diseases.

Cancer and Other Tumors

Sixty-two cases of cancer and other tumors were found in the survey population. Of these, 5 were found among the Whites, 29 among the Negroes, 27 among the Puerto Ricans, and 1 for a person of the "other" group. These figures were too small to warrant a detailed analysis but the morbidity rate of 0.68% did not differ materially from the estimate of 0.71% of the United States population which was given in the National Health Survey.

Diabetes

Diabetes was reported in only 53 cases and was not statistically significant. There were 11 cases in the White group, 27 in the Negro, and 15 in the Puerto Rican. In all the groups, female sufferers from this disease predominated, especially among the Puerto Ricans. Moreover, among the latter the disease occurred at an earlier age. Among the Puerto Ricans, the youngest diabetic was found in the 25-29 age group; among the Negroes, in the 30-34 age group; among the Whites, in the 35-39 age group.

POPULATION GROUPS - CHARACTERISTICS AND DIFFERENCES

Although the incidence of chronic disease was similar in the three main groups of the survey population, the morbidity rates of the different forms of chronic disease varied so sharply as to warrant separate consideration of each population group.⁴³

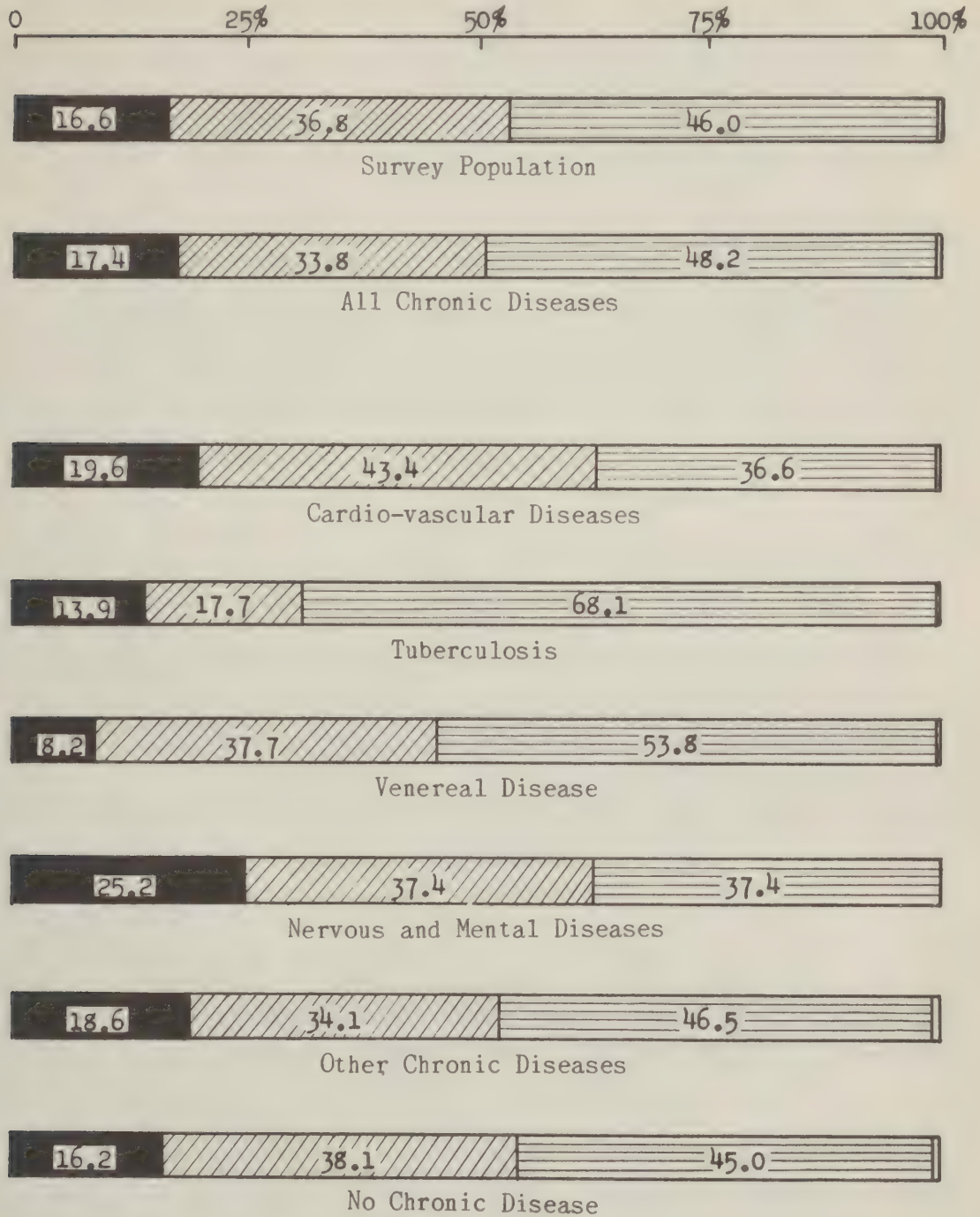
Puerto Ricans

The Puerto Ricans, as has been shown, formed the largest as well as the youngest population group; nearly half of them were children under 15. Yet the total incidence of chronic disease among them was as great as among the Negroes or the Whites. They accounted for almost half of the individuals found to be suffering from all types of chronic disease and were responsible for a disproportionate percentage of the cases of tuberculosis (68.1%) and venereal disease (53.8%). On the other hand, only three-eighths of the nervous and mental cases and of the cardiovascular diseases occurred in this group. In other words, while they constituted nearly half the population, they were responsible for only slightly more than one-third of the latter two types of chronic disease. Hence, it was the preponderance of tuberculosis and venereal disease which raised the incidence

⁴³See Table XII, p. 29, Table X, p. 23, and Figure 2, p. 28.

Figure 2

PERCENTAGE DISTRIBUTION OF CHRONIC DISEASES IN POPULATION SURVEYED
By Population Groups and Various Chronic Diseases

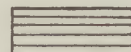


LEGEND

White



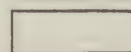
Puerto Rican



Colored



Other & Unknown



of chronic disease in this relatively young group. It is especially interesting to note that of 28 individuals suffering from both tuberculosis and venereal diseases, 25 were Puerto Ricans.

Negroes

The Negroes, constituting about 38.0% of the survey population, accounted for one-third of the persons suffering from chronic disease. The degree to which this group was responsible for chronic ailments other than tuberculosis conformed with their population percentage.⁴⁴ With respect to tuberculosis, it is noteworthy, and quite contrary to popular opinion, that only slightly more than 16.0% of the tuberculosis cases were found among them.

There was no significant difference between the morbidity rates for chronic disease other than tuberculosis among the Negro group in this health area and the rates estimated by the National Health Survey. But while the Negroes had the lowest incidence of tuberculosis in the area, the rate found was more than three times that estimated for the entire United States population. The significance of the relatively low rate for tuberculosis as compared with the two other population groups has already been discussed under tuberculosis.

Whites

Although one-sixth of the survey population was White, approximately one-third of this group suffered from chronic disease and accounted for slightly more than one-sixth of the total cases of chronic disease. Only one-seventh of the tuberculosis cases occurred in this group but the morbidity rate of 3.3% was nearly twice that found among the Negroes.⁴⁵ The White group led in the incidence of nervous and mental cases, showing an incidence more than twice that estimated by the National Health Survey and double that found among the Puerto Ricans. It is significant that 2.3% of the White adults were classified as unemployable because of disability resulting from nervous and mental diseases. Only 1.4% of the Negro adults were unemployable for this reason, while .9% of the Puerto Rican adults were unemployable because of this disability.

TABLE XII

PERSONS WITH CHRONIC DISEASES IN HEALTH AREA 20
PERCENTAGE DISTRIBUTION BY POPULATION GROUP, NEW YORK CITY, MARCH, 1939

	TOTAL	WHITE	NEGRO	PUERTO RICAN	OTHER
Population	100.0	16.6	36.8	46.0	0.6
All Chronic Diseases	100.0	17.4	33.8	48.2	0.6
Cardiovascular Diseases	100.0	19.6	43.4	36.6	0.4
Tuberculosis	100.0	13.9	17.7	68.1	0.3
Venereal Diseases	100.0	8.2	37.7	53.8	0.3
Nervous and Mental Diseases	100.0	25.2	37.4	37.4	0.0
Other Chronic Diseases	100.0	18.6	34.1	46.5	0.8
No Chronic Diseases	100.0	16.2	38.1	45.0	0.7

⁴⁴⁻⁴⁵See Table X, p. 23, and Table XII, p. 29.

ACUTE ILLNESS

In contradistinction to the chronic diseases, the acute illnesses, since they are more dramatic in their onset, thrust themselves into the consciousness not only of the scientist and the physician but also of the layman. It is this constant awareness of the presence or likelihood of acute disease that makes possible its control.

Within the definition of this study, acute illness was not sharply differentiated from chronic disease by an arbitrary time limit since length of disability caused by any illness was not recorded. Only the diagnosis of the illness was used to determine its probable course. Thus, grippe was listed as acute; tuberculosis as chronic.

It may be assumed that not every acute illness suffered in every family by every individual was recorded. Acute illnesses noted in the Department of Welfare case records from which the information was secured either were sufficiently severe for the families to mention them and the investigators to make note of them during the regular monthly visits or were treated by physicians on the panels of the Department of Welfare on the request of the individuals or families involved. It is believed that the majority of the illnesses designated as acute lasted a week or more.

A total of 1129 acute illnesses were reported from March, 1938, to March, 1939, i.e., during the year preceding the date of this study. Approximately one-eighth of the total survey population suffered from some type of acute illness during that year. The National Health Survey, including only acute illnesses lasting one week or longer, estimated that almost one-tenth of the United States population suffered from acute illness during the same period. The difference in incidence of acute illness in Health Area 20 and the estimate for the United States was less marked than that for chronic illness in the two surveys.⁴⁶ In this study there was a preponderance of chronic diseases to the extent of 43% over the National Health Survey as against a preponderance of 30% in the acute diseases.

For the purposes of this study, acute ailments were divided into four major groups as follows:⁴⁷

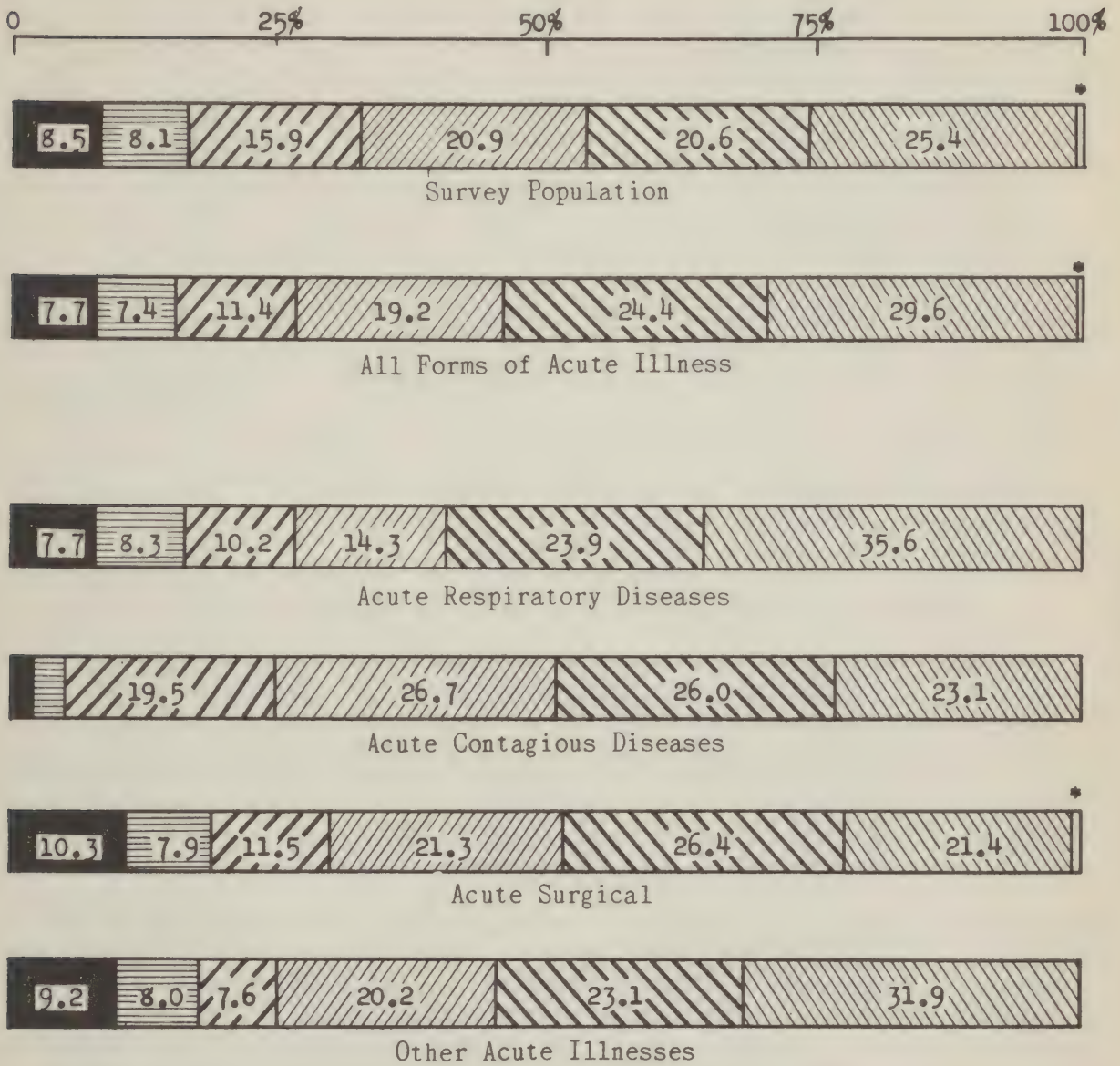
1. Acute upper respiratory diseases such as bronchitis, tonsillitis, and pneumonia.
2. Acute contagious diseases, such as measles, scarlet fever, chicken pox, etc.
3. Acute surgical diseases including any operation causing temporary disability.
4. Others--such as acute gastro-intestinal, urinary, gynecological, and circulatory diseases.

⁴⁶The National Health Survey estimated that 17.7% of the United States population suffered from chronic disease. According to this survey, there was a total incidence of chronic disease of 31.4% in Health Area 20 and an incidence, less venereal disease, of 25.5%. Cf. Table VIII, p. 19.

⁴⁷See Figure 3, p. 31.

Figure 3

PER CENT DISTRIBUTION OF ACUTE ILLNESS IN POPULATION SURVEYED
By Population Groups, Sex, and Various Forms of Acute Illness
Health Area 20, New York City, March, 1939



LEGEND

	Male	Female
White		
Colored		
Puerto Rican		

*Other population groups

The largest single group of acute illnesses, 469, or more than two-fifths of the total 1129 cases, was respiratory in character. Surgery accounted for 253 cases, or more than one-fifth, and acute contagion for 169 cases, or slightly more than one-seventh. Other acute diseases occurred in slightly more than one-fifth of the group.

The peak of morbidity occurred in the age group 1-4, with a rate of 17.8 per 100 cases of acute illness. The same group showed the highest age specific rate for both acute respiratory and acute contagious disease, 9.9% and 6.1%, respectively. These two types of illness accounted for nearly nine-tenths of the acute illness in the 1-4 year group. Such a high incidence of morbidity in the pre-school group deserves special emphasis. Preventive public health measures have, until fairly recently, concentrated on the infant under one and on the child in school, and have rather tended to overlook the pre-school child. The hazard from contagion has been emphasized as a school hazard. However, from the findings in this study, it may be assumed that the sibling of the school child is more susceptible than the latter even though he is, apparently, less exposed. As compared with a rate of 6.1% in the age group 1-4, there was an incidence of 4.4% of contagion in the age group 5-9.

The incidence of contagion diminished steadily with successive age groups. It was nearly five times as common among the Negroes and four times as common among the Puerto Ricans as it was among the Whites. This higher incidence among the relatively younger population groups might have been anticipated in the light of the findings of this study, but on the same basis the incidence among the Negroes was disproportionately high.

The acute respiratory diseases which affected 5.1% of the population were most common among the Puerto Ricans and affected the Negro population least. As has already been stated, the highest age specific rate occurred in the age group 1-4. On analysis, this was true also for the Puerto Ricans and Whites but not for the Negroes where the incidence of this form of illness was more evenly distributed throughout the various age groups. Next to the pre-school group, the age group 30-34 showed the highest susceptibility to respiratory diseases and to acute illness as a whole.

Temporary disability due to surgery occurred in 253 cases, or 2.7%, of the people. This form of disease was more common among males than females, especially among the Whites and the Puerto Ricans. Other acute diseases affected the Puerto Rican and White groups in proportionately higher percentages than the Negroes.

In summarizing the acute illnesses,⁴⁸ it may be said that they affected the females more than the males. Puerto Ricans of both sexes showed a relatively higher incidence, in proportion to their population group, for all forms of acute illness, especially the acute respiratory diseases. The Negro group showed a disproportionately low incidence except for the acute contagious diseases in which the incidence was notably high. The rate for the White group was low except for the "Other" acute illnesses and the incidence of acute surgical diseases among males.

⁴⁸See Figure 3, p. 31.

REGISTRATION AT HEALTH DEPARTMENT CLINICS*

The East Harlem Health Center, situated in the heart of Health Area 20 and serving the entire East Harlem Health District, performs a number of vital functions through the medium of the several services located in the Health Center itself, in the Meinhard Clinic, which is a substation of the Center, and in two additional child health stations. The latter three substations are located in different sections of East Harlem but are all outside of Health Area 20. Chief among the services provided by the Health Center and its several substations are the following:

1. Child Health Service - Here well babies are examined, mothers are instructed in the feeding, hygiene, and general care of their infants, and the immunization procedures such as vaccination and diphtheria immunization are carried out. This service does not care for sick babies but refers them to either private physicians or hospital clinics.
2. Chest Service. This is for the examination of chests and the diagnosis and supervision of cases of tuberculosis. Such diagnostic procedures as X-ray, sputum examination, examination of gastric contents and other indicated procedures are carried out. An important part of this service is the examination of contacts and follow-up of diagnosed cases including instruction in home care.
3. Social Hygiene Service. This service, in the Center building, is limited to the diagnosis of venereal diseases in all groups of the population and to treatment only in connection with pre-natal and congenital syphilis and vaginitis. Case finding through examination of contacts and supervision and follow-up in the home are also carried out. New-born babies, following discharge from the hospital, are referred to this service for examination and supervision. The babies of mothers who have had treatment in this service are referred back, as soon after birth as possible, and are examined periodically. They are also given various tests to determine whether they are free from syphilis. All other types of treatment for the venereal diseases are carried out in the Meinhard Clinic which is open evenings as well as in the daytime, thus providing working people with an opportunity for treatment.⁴⁹
4. Dental Service. This is maintained for pre-school as well as school children. Extractions, fillings, prophylactic treatment, and instruction in the care of the teeth are provided. Emergency treatment is given to children of all ages while those applying for working papers are given precedence.

In addition to the foregoing, a Parasitology Clinic is maintained in the Meinhard substation. An attempt is made to individualize treatment in all the services through the use of the appointment system.

Other miscellaneous activities of the Center are its nutrition demonstrations and cooking classes. Health education lectures, illustrated by

*Foot Note: Location of Health Department Clinics are shown on map at front of this publication.

⁴⁹Ordinarily, all services provided in the Health Center are duplicated in the Meinhard Clinic which is the largest of the substations. The Social Hygiene Service is divided because the quarters in the Center are too small to permit complete activity.

moving pictures and posters, are held in the Center as well as in settlements, churches, and other places throughout the district, while pamphlets on various health subjects are distributed to all who are interested. A park playground with Park Department employees in attendance at all times is maintained on the roof of the Center and is equipped with customary playground apparatus. It is available to pre-school groups and to all the children in the neighborhood. One very important activity is the dissemination of health information. Approximately 700 to 1000 questions concerning every conceivable subject are asked at the Center's Information Desk each month.

At the time that this study was undertaken, a centralized index of all the cases registered in all the services in the Center and its substations⁵⁰ was in operation in the Center. This index was checked to find to what extent the services of the Center had been utilized by the members of the survey population, but the tabulation was limited to the child health, chest, and social hygiene services. The findings are discussed, seriatim, below.

Child Health Clinic

Nearly two-fifths of all the children under five years of age were registered at the child health clinic. Of the 1104 children under five in the survey population, 67 were infants under one year. It is difficult to make comparisons with other studies because no subdivision into infant and pre-school clinic attendance was made in this survey. A report made by the Bureau of District Health Administration in November, 1940, indicated that in East Harlem in 1939 almost half the infants under one year were registered at the Health Department Child Health Clinics. Since the present study included the first five years, the comparison was favorable for the survey population because the percentage for the entire group was relatively only slightly lower than that for the first year alone in East Harlem. It is known also that some of the infants and pre-school children were attending other clinics, e.g., Mount Morris, Flower-Fifth Avenue, Harlem, and Metropolitan Hospitals. This may account for the favorable balance. The percentage of pre-school children who were registered in Child Health Clinics was lower than that of infants under one year. However, percentages based on the entire age group under five would necessarily be lower than those based on infants under one only. No figures were obtained for children registered at other than Health Department clinics.

Chest Clinics

Of the total number of individuals in the survey population, 1100 were examined either at East Harlem Health Center Chest Clinic or its substation, Meinhard Chest Clinic. Of the total number of persons registered, almost one-quarter was diagnosed as having tuberculosis. An additional 72, approximately one-fifteenth, were held under observation by the clinic for an indefinite period. Slightly more than three-tenths of the survey group examined at the two clinics had findings that merited clinic follow-up. This represents an exceedingly high proportion requiring supervision and follow-up.

⁵⁰ Lack of both funds and adequate personnel has made it impossible to continue the index.

In the Health Department clinics a diagnosis of tuberculosis does not necessarily mean that there was active tuberculous disease at the time of examination but it does indicate that the patient has or has had tuberculosis in a significant form, i.e., other than a primary lesion. On the whole, the East Harlem Chest Clinics make diagnoses of tuberculosis for 12% to 15% of their patients. It would appear, therefore, that conditions in the Health Area 20 relief group are unusual in this respect.

Recognition of this situation led the Health Department to make a special mass X-ray survey of residents of East Harlem in 1937 at the Lower Harlem Chest Clinic. The purpose of the survey was to find new cases of tuberculosis. In the course of the survey, 1458 people in the present study were X-rayed. Despite the fact that those X-rayed were selected at random from the relief rolls and not because of history of exposure to the disease or because of symptoms, almost one-seventh were diagnosed either as cases of tuberculosis or as cases requiring further follow-up at a Health Department Chest Clinic.

Of the 9119 persons in the present study, 2357⁵¹ were examined at a Health Department Chest Clinic. Applying the percentage diagnosed positive (13.8%) in the mass survey to the remaining 6762 never examined in a Health Department Chest Clinic, it will be seen that there might have been 932 undiscovered cases of tuberculosis in the unexamined group. This estimate is probably high because the percentage of children examined in the mass survey was small in comparison to their proportion in the population in the present study, and the amount of significant tuberculosis found would be appreciably smaller in children. Nevertheless, even assuming that the estimate was 50% inaccurate and that there were only 400 to 500 cases of undiscovered tuberculosis, it would still indicate the need for another X-ray survey of the group not previously examined.

Social Hygiene Clinics

Of the 542 people in the survey population who were examined at one of the two Health Department Social Hygiene Clinics in East Harlem, 234, or 43.2%, were found to have a venereal disease at the time of examination. At the Meinhard Social Hygiene Clinic, 273 were examined and 193, 70.7%, were found to be positive. At the East Harlem Health Center Clinic, 269 were examined and only 41, or 15.2%, were diagnosed as cases of venereal disease. Since, as has been pointed out, the latter clinic is used for the purpose of diagnosis and case finding through the examination of special groups and apparently healthy individuals such as barbers, housekeepers, etc., while the Meinhard Clinic is used for treatment, the discrepancy between the number of positive cases of venereal disease found in the Center Clinic and in the Meinhard Clinic is entirely reasonable.

Clinics and Institutions Rendering Medical Care

More than half of the survey population had received no medical care

⁵¹ This figure was derived by adding the 1100 examined at the East Harlem Health Center and its substation, Meinhard Clinic, to the 1458 included in the mass survey and subtracting the 201 diagnosed as positive because it was assumed that they also attended the East Harlem Health Center or its substation, Meinhard Clinic.

since their acceptance for relief, according to the information recorded in the case records by the Department of Welfare investigators. Of this number, 386⁵² had disease symptoms of one sort or another but had never consulted a physician about them. In this study, the latter individuals were classified as having not acceptable self-diagnoses of a disease or diseases and their cases were not included in any of the previous tables or discussions. Three-tenths of the 360 individuals with one self-diagnosed disease complained of rheumatism, almost one-seventh of heart disease, and approximately one-thirteenth of a deficiency disease such as rickets, malnutrition, etc. The remainder of the self-diagnoses were varied.

Although 4456 members of the survey population complained of no chronic disease symptoms and never attended a clinic or a private physician's office during the time they were on relief, almost half of the population (4277) did receive some form of diagnostic or therapeutic medical care during this period. The source supplying medical care to the largest number of people was the Health Department. About one-third of the entire survey population was examined or treated at one or more of the Health Department Clinics. Clinics other than Health Department, frequented by the next largest group of the survey population, were maintained by public or voluntary hospitals or agencies. Altogether, one-fifth of the group attended one or more of such clinics. Other sources of medical care were private physicians and hospitals and the chronic care service of the Department of Welfare. Each of the two former agencies gave aid to approximately 300 of the survey population.

Of the 4277 persons who did seek some medical care or advice, one-quarter were examined at more than one treatment source. This does not mean, necessarily, that they all sought duplicate service for the same illness. It is possible that many of the group who attended more than one type of clinic were referred to the second by the Health Department Clinics. For example, if a person presented himself at a Health Department Social Hygiene Clinic because of a skin rash and the latter was found not to be venereal in origin, the patient would be referred to a private physician or a dermatology clinic for further investigation and treatment. Other reasons for attending more than one type of clinic would be the existence of two entirely dissipated complaints or illness. Only 153 (3.5%) of those who sought medical care attended more than two types of clinics or institutions for medical care.

From the foregoing data it is obvious that the chief emphasis of the Health Department is on preventive medical service. Three-quarters of the 2128 people who used the Health Department service solely were diagnosed as being free of chronic diseases whereas only one-tenth of those receiving care from private physicians or from clinics other than Health Department Clinics were so diagnosed. This may be explained by the well-known fact that people who go to a physician or a hospital clinic for specific complaints are usually ill. The Health Department Clinics, on the other hand, maintain services for the supervision of well babies and the examination of contacts to cases of tuberculosis and venereal disease. These contacts have no symptoms or complaints themselves but attend the Health Department Clinics largely because they are sent for in connection with the supervision of a case of communicable disease.

⁵²Of the 386, 26 claimed to have two diseases.

APPENDIX #1

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Survey of Relief Recipients in Health Area 20

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APPENDIX #2 (CONTINUED)

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